Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A microlithographic arrangement comprising

a) a microstructured layer of a nanocomposite composition comprising

a1) a polymerizable silane of the general formula (I) and/or (II) and/or condensates derived therefrom

$$SiX_4 \quad (I)$$

in which the radicals X are identical or different and are hydrolyzable groups or hydroxyl groups;

$$R^1{}_aR^2{}_bSiX_{(4-a-b)} \qquad (II)$$

in which R^1 is a nonhydrolyzable radical, R^2 is a radical carrying a functional group, X has the above meaning and a and b have the value 0, 1, 2 or 3, the sum (a + b) having the value 1, 2 or 3,

and

a2) nanoscale particles selected from the group consisting of the oxides, sulfides, selenides, tellurides, halides, carbides, arsenides, antimonides, nitrides, phosphides, carbonates, carboxylates, phosphates, sulfates, silicates, titanates, zirconates, aluminates, stannates, plumbates and mixed oxides thereof, as a top coat;

b) a bottom coat comprising an aromatics-containing polymer or copolymer containing novolaks, styrenes, (poly)hydroxystyrenes and/or (meth)acrylates;

c) a substrate.

2. (original) The microlithographic arrangement as claimed in claim 1, wherein the top coat a) is a sol film.

3. (previously presented) The microlithographic arrangement as claimed in claim 1, wherein the substrate c) is a semiconductor material.

4. (currently amended) The microlithographic arrangement as claimed in claim 1, wherein the nanocomposite composition contains from 1 to 50 percent by volume~~, preferably from 1 to 30 percent by volume,~~ of nanoparticles.

5. (currently amended) The microlithographic arrangement as claimed in claim 1, where the nanoscale particles have been surface-modified with compounds selected from the group consisting of the carboxylic acids, carboxamides, carboxylic esters, amino acids, β-diketones, imides, quaternary ammonium salts of the general formula $N^+R^{10}R^{20}R^{30}R^{40}Y^-$, where the radicals R^{10} to R^{40} are identical or different and ~~may be~~ are aliphatic, aromatic and/or cycloaliphatic groups and Y^- is an inorganic or organic anion.

6. (currently amended) The microlithographic arrangement as claimed in claim 1, wherein the nanocomposite composition contains polymerizable monofunctional ~~and/or~~ monomers, bifunctional monomers, oligomers and/or polymers selected from the group consisting of (poly)acrylic acid, (poly)methacrylic acid, (poly)acrylates, (poly)methacrylates, (poly)acrylamides, (poly)methacrylamides, (poly)carbamides, (poly)olefins, (poly)styrene, (poly)amides, (poly)imides, (poly)vinyl compounds, (poly)esters, (poly)arylates, (poly)carbonates, (poly)ethers, (poly)etherketones, (poly)sulfones, (poly)epoxides, fluorine polymers, organo(poly)siloxanes, (poly)siloxanes and hetero(poly)siloxanes.

7. (previously presented) The microlithographic arrangement as claimed in claim 1, where the nanocomposite composition contains a fluorosilane of the formula (III)

$$R^3 (X^1)_3Si \quad (III)$$

in which

R^3 is a partly fluorinated or perfluorinated C_2-C_{20}-alkyl and

X^1 is C_1-C_3-alkoxy, chlorine, methyl or ethyl.

8. (previously presented) The microlithographic arrangement as claimed in claim 1, wherein the nanocomposite composition contains a crosslinking initiator.

9. (previously presented) A method for the production for microlithographic arrangement as claimed in claim 1, comprising the steps:

i) production of a planar uncured sol film of said nanocomposite;

ii) production of a target substrate comprising a bottom coat b) and a support c);

iii) transfer of sol film material from i) by means of a microstructured transfer imprint stamp to the bottom coat b) in ii);

iv) curing of the transferred sol film material;

v) removal of the transfer imprint stamp to give an imprinted microstructure as top coat a).

10. (original) The method as claimed in claim 9, wherein the uncured sol film i) is applied to a planar starting substrate comprising a support and/or an adhesion-promoting film.

11. (previously presented) The method as claimed in claim 9, wherein the transfer imprint stamp comprises silicone, glass or silica glass.

12. (previously presented) The method as claimed in claim 9, wherein the transfer imprint stamp is pressed into the sol film i) for from 5 to 300 seconds, then removed and placed on the bottom coat b) in the course of from 10 to 300 seconds and pressed against b) for a time of from 10 to 300 seconds under a pressure of from 10 to 100 kPa.

13. (previously presented) The method as claimed in claim 9, wherein thermal curing or UV curing is carried out while the transfer imprint stamp is pressed against b).

14. (currently amended) A method for the production of a microstructured semiconductor material, comprising the steps i) to v) as claimed in claim 9, support c) being the semiconductor material to be structured, and the steps

vi) plasma etching of the residual layer of the nanocomposite sol film, ~~preferably with CHF_3/O_2 plasma,~~

vii) plasma etching of the bottom coat, ~~preferably with O_2 plasma,~~

viii) etching of the semiconductor material or doping of the semiconductor material in the etched areas.

15. (new) The microlithographic arrangement as claimed in claim 1, wherein the nanocomposite composition contains from 1 to 30 percent by volume of nanoparticles.

16. (new) The method of claim 14 wherein for step vi), the plasma etching is done with CHF_3/O_2 plasma.

17. (new) The method of claim 14 wherein for step vii), the plasma etching is done with O_2 plasma.